## Department of Health and Human Services National Institutes of Health National Institute of Nursing Research Minutes of the National Advisory Council for Nursing Research

May 24-25, 2006

The 59th meeting of the National Advisory Council for Nursing Research (NACNR) was convened on Wednesday, May 24, 2006, at 1:05 p.m. in Conference Room D, Building 45, National Institutes of Health (NIH), Bethesda, MD. The first day of the meeting adjourned at approximately 5:35 p.m. The open session of the meeting continued on the next day, Thursday, May 25, 2006, at 9:00 a.m., and was adjourned 9:30 a.m. The closed session of the meeting, which included consideration of grant applications, was immediately convened and continued until adjournment at on the same day at 1:00 p.m. Dr.Mary E. Kerr, Executive Secretary, NACNR, opened the meeting on behalf of Dr. Patricia A. Grady, Chair, NACNR, who joined the meeting during the open session on May 24, and presided over the remainder of the open session and the closed session.

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#### **OPEN SESSION**

I. CALL TO ORDER, OPENING REMARKS, COUNCIL PROCEDURES, AND RELATED MATTERS

Dr. Kerr called the 59th meeting of the NACNR to order, welcoming all Council members, visitors, and staff on behalf of Dr. Grady.

### Conflict of Interest and Confidentiality Statement

Dr. Kerr reminded attendees that the standard rules of conflict of interest applied throughout the Council meeting. Briefly, all closed session material is privileged, and all communications from investigators to Council members regarding any actions on applications being considered during the Council should be referred to NINR staff. In addition, during either the open or the closed session of the meeting, Council members with a conflict of interest with respect to any topics or any application must excuse themselves from the room and sign a statement attesting to their absence during the discussion of that application. Dr. Kerr also reminded NACNR members of their status as special federal employees while serving on the Council, and that the law prohibits the use of any funds to pay the salary or expenses of any federal employee to lobby or otherwise influence State legislatures or Congress. Specific policies and procedures were reviewed in more detail at the beginning of the closed session and were available in Council notebooks.

### Minutes of Previous NACNR Meeting

Standing Council members received a copy of the minutes of the January 24-25, 2006, NACNR meeting by electronic mail. No changes or corrections to the minutes of the January 2006 Council meeting were suggested during the May meeting. A motion to approve the minutes of the January 24-25, 2006, Council meeting as circulated was proposed and seconded. Comments, corrections, and changes to the January meeting minutes should be forwarded to Dr. Grady or Dr. Kerr. The minutes of each quarterly NACNR meeting are posted on the NINR Web Site (http://ninr.nih.gov/ninr).

### **Dates of Future Council Meetings**

Dates of future meetings in 2006 and 2007 have been approved and confirmed. Council members should contact Drs. Grady or Kerr regarding any conflicts or expected absences.

### 2006

• September 26-27 (Tuesday-Wednesday)

### 2007

- January 23-24 (Tuesday-Wednesday)
- May 22-23 (Wednesday-Thursday)
- September 25-26 (Tuesday-Wednesday)

### II. REPORT OF THE DIRECTOR, NINR (Dr. Mary Kerr, Deputy Director, NINR)

The Director's report focused on updates since the last Council meeting and on current and impending activities and initiatives related to the budget, NIH, and NINR.

**Budget Updates**—In fiscal year 2006 (FY06), the NINR budget of \$137,342,000 decreased by approximately 0.5 percent compared with the prior fiscal year, while the overall NIH appropriation of \$28.5 billion was reduced by 0.12 percent. The proposed for FY07 budget appropriation is \$136,650,000 reflecting a reduction of an additional 0.5 percent, and the overall proposed for NIH budget for FY07 is flat. The NINR budget for FY06 is \$137,342,000; and the

proposed funding for FY07 is \$136,650,000. The President's FY07 budget was presented to Congress on February 6, 2006, and final approval of an appropriations bill is anticipated later this year..

The NINR application success rate is similar to that of other Institutes and Centers (ICs) with a success rate of 20-25 percent for the past few years; a rate of approximately 20 percent is estimated for FY06. Despite recent constraints in funding, NINR continues to support good science, including new applications, but, by extension, only those who apply have an opportunity to receive available monies.

NIH Updates—In an effort to expand outreach to the community, NIH Director Dr. Elias Zerhouni established the NIH Newsletter and an e-mail address by which he can be contacted directly, zerhounidirect@nih.gov. A new joint NIH-Department of Health and Human Services (DHHS) initiative that creates a vision for the future of health care predictive, personal, and preemptive, also known as "the three Ps". This new vision to transform care from "curative" to "preemptive" is consistent with the perspective of nursing science and holds promise for the future.

Dr. Kerr reported on updates regarding submission of applications to NIH. The new deadline for electronic submissions is 5:00 p.m. local time. Common errors that delay electronic submission are failure to include an identification (ID) number and a mismatch between the institution's ID number and their DUNS number. Also, NINR has joined the NIH Omnibus R21 Exploratory Grant Mechanism, which is described in detail at http://grants.nih.gov/grants/funding/r21.htm. The NIH Office of Extramural Research continues to develop its multiple-PI initiative. The

multiple-PI option requires the designation of a single "Contact PI," who serves as the liaison between NIH and other PIs and investigators on a project and who coordinates progress reports for the research. The multiple-PI program is currently being pilot tested and will supplement rather than replace other programs and models. Additional details and information may be found at <a href="http://grants2.nih.gov/grants/multi-pi/index.htm">http://grants2.nih.gov/grants/multi-pi/index.htm</a>.

Several NIH Roadmap opportunities are available, including the 2006 NIH Director's Pioneer Award Program (DP1). The Pioneer Award supports individual scientists and gives recipients the intellectual freedom to pursue new research directions and highly innovative ideas that have the potential for unusually great impact (RFA-RM-06-005). Another initiative, the Interdisciplinary Research Consortium will strive to strengthen the dynamic process of study of human biology and behavior, and encourage collaboration across divisions within biomedical research to enhance scientific discovery (RFA-RM-06-008). This initiative involves training, supplements to existing awards, and establishing interdisciplinary research centers (U54 with K01, P30, R01, R21, R25, T90). The program has two phases that start with pre-applications followed by invitations to some groups to submit full applications. The pre-applications were due April 18, 2006. The full consortium program Requests for Applications (RFAs) are available at http://grants.nih.gov/grants/guide/rfa-files/RFA-RM-06-008.html. Another initiative, the NIH Pathway to Independence ("PI") Award, uses a K99/R00 mechanism to provide 5 years of support in two phases. Phase one includes mentored support for the first 1-2 years of the award, and phase two provides funding for up to 3 additional years of independent research (http://grants. nih.gov/grants/guide/pa-files/PA-06-133.html). The award is open to postdoctoral candidates; up to 200 awards are anticipated in the initial year. An announcement for a T90 award for cross-training of investigators to create new research teams also has been

released (RFA-RM-06-006). Finally, the NIH plans to reissue the Institutional Clinical and Translational Science Awards (CTSAs) Program, with submissions expected to be due early next year (http://www.ncrr.nih. gov/clinicaldiscipline.asp).

NINR and nursing research are represented at a range of NIH meetings and conferences. The first Symposium of the NIH Pain Consortium, co-chaired by Dr. Grady, convened April 17-18, 2006, on the NIH Campus. The focus of this meeting was on advances in pain research. Information about the Consortium is available at http://painconsortium.nih.gov. The inaugural conference of the Patient-Reported Outcomes Measurement Information System (PROMIS) will be held September 11-13, 2006, in Gaithersburg, MD. Topics will include key PROMIS activities, methods of patient-reported outcomes (PRO), and PRO measurement systems in development and in use around the world (http://www.nihpromis.org/). NINR also is supporting and participating in the 10th anniversary celebration of the Office of Behavioral and Social Sciences Research (OBSSR), June 21-22, 2006, at the Natcher Conference Center on the NIH Campus in Bethesda (http://obssr.od.nih.gov/OBSSR10th/index.htm). In closing the NIH update, Dr. Kerr noted that *U.S. News and World Report* reported that according to recent statistics, the NIH Web Site is the second-most frequently visited federal web site after the Internal Revenue Service's site.

NINR Updates and Outreach—Papers from the 2004 State-of-the-Science Conference, "Improving End-of-Life Care," have been compiled into a supplement to the *Journal of Palliative Medicine* (December 2005, Volume 8, Supplement 1). A free copy is available online at <a href="http://www.liebertonline.com/toc/jpm/8/supplement+1;jsessionid=nlErBVFHips6UEoXvV">http://www.liebertonline.com/toc/jpm/8/supplement+1;jsessionid=nlErBVFHips6UEoXvV</a>. A new feature of the NINR Web Site provides links to podcasts of a range of audio broadcasts,

including NIH radio interviews with NINR Director Dr. Grady; presentations and the keynote speech at the Science Symposium, "Nursing Research: Changing Practice, Changing Lives," that kicked of the NINR 20th anniversary; and others. Streaming video of the NIH State-of-the-Science Conference on Improving End-of-Life Care also is available. More information and downloadable podcasts may be found at <a href="http://ninr.nih.gov/ninr/podcasts/downloads.html">http://ninr.nih.gov/ninr/podcasts/podcast.html</a>.

Dr. Grady has made several presentations since the last Council meeting, including "Informing the Nation's Research Agenda," to the Robert Wood Johnson Foundation on April 6, 2006. She delivered the keynote address at the Thomas Jefferson University's Jefferson College of Health Professionals on April 20, 2006 and participated in a panel discussion titled, "Creating the Preferred Future for Policy that Promotes Patient Safety," at the University of Maryland School of Nursing on May 12, 2006. In addition, Dr. Grady's "News from NINR" column in Nursing Outlook was resumed in 2005. In other news from the Office of the Director, Dr. Kerr extended congratulations to Dr. Grady on being named one of the "100 Most Powerful Women of Washington" by Washingtonian Magazine. Dr. Sue Marden, Clinical Nurse Specialist, NINR's Symptom Management Laboratory, received the Rear Admiral Faye G. Abdellah Publication Award for Nursing Research for her article on of the effect of intermittent versus continuous highly active antiretroviral therapy on quality of life in patients with chronic HIV infection (AIDS 20:837-845, 2006).

Extramural investigators and research studies also have been cited in the news and have received special recognition since the last Council meeting. Dr. Elaine Larson was interviewed for an article titled, "Hand Sanitizers, Good or Bad?" and Dr. Judith Maloni for "Don't Take This

Lying Down" on bed rest during pregnancy; these articles appeared in the March 21 and March 26 editions, respectively, of *The New York Times*. The United Press International (UPI) featured Dr. Judith Mercer's research on the effect of delayed cord clamping in reducing the incidence of late-onset sepsis and intraventricular hemorrhage in premature infants in an April 11 article. Dr. Suzanne Bakken, Columbia University School of Nursing, was named *Computerworld Magazine*'s "Laureate" for 2006 for her work on mobile decision support for advanced practice nursing (R01 NR08903). Dr. Norma Metheny, St. Louis University School of Nursing, was awarded the 2006 Distinguished Nutrition Nurse Award by the American Society for Parenteral and Enteral Nutrition for her research on placement of tube feedings in different populations to identify low-risk, validated methods with clinical applications. Investigators are asked to forward articles and presentation notices to NINR Program Officers to ensure timely acknowledgement and for tracking of NINR-supported researchers' publications as part of the Institute's overall outreach efforts.

The Seventh Annual NINR Summer Genetics Institute (SGI), a 2-month, intensive research training program, is scheduled for June 5-July 28, 2006. The SGI is designed to provide a foundation in genetics for use in research and clinical practice, expand the research capability among graduate students and faculty in schools of nursing, and develop and expand the basis for clinical practice in genetics among advanced practice nurses. A total of 102 nurses have graduated from the program; this year's course will welcome 20 new students. Graduates of NINR's SGI have been successful at publishing in the scientific literature, submitting research applications that capitalize on their new genetic knowledge, and integrating genetic content into university curricula. The deadline for applications for this year's SGI has passed. Additional information is available at http://ninr.nih.gov/research/.

As part of NINR's 20th anniversary celebration, staff participated in the four 2006 regional nursing research meetings through the presentation of special panel sessions focusing on research mentorship. The presentations featured mentor – mentee pairs and explored lessons learned in effective mentoring; they were very well attended and were received with interest and enthusiasm. Another anniversary event is the 20th Anniversary NINR-NIH Clinical Center Joint Collaborative Conference titled, "Celebrating Nursing Science: The Research-Practice Link," on Friday, June 16, 2006, at Masur Auditorium in the NIH Clinical Center. The Conference is open to clinicians and researchers who are interested in exploring this link; online registration is available, and there is no charge to attend this conference. NINR's year-long anniversary celebration will culminate on October 11, 2006, with the 2006 NINR 20th Anniversary Symposium, which will be held in conjunction with the 2006 National State of the Science in Nursing Research. The theme of the Anniversary Symposium is, "Making it Happen: The Future of Nursing Research." Further information and updates on NINR training programs and research initiatives, meetings, and other activities can be found by visiting the NINR home page at <a href="http://ninr.nih.gov/ninr/">http://ninr.nih.gov/ninr/</a>.

### III. CLINICAL RESEARCH PEER REVIEW: CONTINUITY AND CHANGE (Dr. Antonio Scarpa, Director, NIH Center for Scientific Review)

In 1945, the NIH established the first study section to review proposed syphilis research. The modern peer review process evolved from that point to become the "heart and soul" of NIH. It has produced an effective partnership between the federal government and research institutions and has created the best academic medical centers and biomedical/behavioral and biotechnology

research. Peer review also has optimized treatment and prevention of a myriad of diseases and conditions. The process established at NIH has been admired and imitated here and abroad. It also has protected NIH against outside influence.

The mission of the Center for Scientific Review (CSR) is to ensure that NIH grant applications receive fair, independent, expert, and timely reviews—free from inappropriate influences—to permit the NIH to fund the most promising research. CSR has four review divisions and 23 integrated review groups (IRGs). Nearly all NINR and other nursing-related applications are routed through the Health of the Population IRG and the Risk, Prevention, and Health Behavior IRG under the Division of Clinical and Population-Based Studies. The role and responsibilities of CSR have grown tremendously in the past several years as the total number of applications to NIH has doubled, increasing from about 40,000 in FY98 to almost 80,000 in FY05. The number of applications referred for CSR review mirrors this trend, with CSR overseeing the review of about 25,000 submissions in FY98 to more than 50,000 in FY05, which required some 18,000 reviewers and nearly 1,800 study section meetings. In FY05, 459 NINR applications were reviewed by CSR representing approximately 1 percent of all CSR applications. A total of 93 CSR study section meetings (5.2 percent of all CSR meetings) reviewed NINR applications in FY05, an increase from 43 (3.1 percent) in FY02. Percentile rankings of NINR R01 submissions are commensurate with or slightly better than those for other ICs.

Although the peer review system used by NIH historically has served the institution and investigators well, it is outdated and has become very expensive to maintain. Factors influencing the need for change include the way research is conducted (e.g., multiple PIs and multidisciplinary teams on studies, multi-site and international studies) and the types of diseases

affecting Americans (e.g., multi-organ, chronic conditions such as obesity and aging), all of which require a different level of investigation and expertise and, in turn, review. Changes in CSR operations include increased communications within CSR and between CSR and the ICs, reviewers, and applicants; the goal of this change is to expand and improve outreach and to ensure awareness and understanding of new procedures and the reasons for these changes. By implementing these operational changes, CSR plans to increase uniformity and efficiency of the review process, facilitate the work of Program Officers, and analyze review group performances.

Strategies to increase uniformity and efficiency include transitioning to electronic submissions and reviews; posting all summary statements within 1 month of study section meetings and summary statements of new investigators within 1 week; unscoring 50 percent of applications; and using text fingerprinting and software (e.g., Collexis) to match applications with summary statements of all reviews within the previous 3 years to facilitate study section or IRG assignment. Nine pilots already are underway to begin to assess these changes and their benefits. Feedback identified the following additional desirable changes in the CSR review: (1) shortening the review cycle; (2) addressing the concern that clinical research is not properly evaluated; (3) improving the assessment of innovative, high-risk/high-reward research; and (4) increasing efforts to recruit and retain more high-quality reviewers.

A recent assessment of all human subject R01s versus R01s not involving human subjects submitted between 2000 and 2004 identified a preference toward non-human subject applications. When a subgroup of applications with specific concerns (i.e. human subjects) were removed from the overall assessment, there was a close alignment between the two categories of R01s. Investigators conducting human subjects research are much less likely to apply for a Type 2A0 or A1 application. And funded Type 1 new human subjects researchers

that do not submit a Type 2 are less likely to submit for another activity than investigators funded for non-human subjects research. These findings suggest that the NIH is losing successful, funded human-subjects investigators at a greater rate than those not conducting human subjects research (i.e., a loss of 40 percent versus 30 percent, respectively).

The significant increase in applications in the past decade is the major driver for the payline. About half of this growth is from new investigators created by the doubling of the NIH budget; additional contributions are from interest in new technologies, returning investigators, and an expanding base (e.g., engineering). Study section improvements include implementation of electronic reviews and use of (or experimentation with) telephone- or video-enhanced discussions and asynchronous electronic discussions. Pre-meeting conference calls and e-mails also help streamline in-person meetings, often by up to 1 day. Clinical reviewers are still needed, and physicists and computational biologists are in growing demand. One area for new research opportunities will require international reviewers (e.g., Fogarty grants).

Other questions being considered are: Is were raised that warrant further consideration. In closing, Dr. Scarpa commented that peer review is essential to the health of the nation. In using coronary heart disease (CHD) as an example, he stated that through identifying the best research to advance heart health, the peer review system directed the significant decrease in CHD deaths in the United States that translated into saving nearly 1 million lives in 2000 alone, based on the difference between actual and projected deaths (about 514,000 and approximately 1,329,000, respectively). The impact is much greater when advances in the treatment and prevention of other conditions nationally and worldwide, such as cancer, are considered.

# IV. ADDRESSING HEALTH DISPARITIES IN EARLY CHILDHOOD: THE CHICAGO PARENT PROGRAM FOR SUPPORTING LOW-INCOME ETHNIC MINORITY PARENTS (Dr. Deborah Gross, Rush University College of Nursing)

The objective of the Chicago Parent Program—to develop and test the effectiveness of a culturally and contextually relevant parenting program for low-income African-American and Latino parents of young, preschool-aged children—advances the NINR Strategic Plan goal of providing leadership in selected areas of science, such as cultural and ethnic considerations in health and illness, including culturally sensitive interventions to decrease health disparities among groups by focusing on health promotion activities and chronic illness management strategies.

The first assumption in developing an effective parenting program—that all parents want their children to feel loved, respected, confident, and good about themselves—often is compounded by additional day-to-day challenges facing low-income parents. The second assumption is that culture affects parents' values, beliefs, and behaviors, and the way parents navigate the world for their children requires cultural understanding and relevance in creating effective messages and information about parenting. The third assumption is that providing services in natural settings (e.g., the home, community programs, early childhood programs) increases the likelihood of reaching and maintaining contact with children, youth, and families who face many barriers to receiving those services in the community.

The Chicago Parent Program builds on the "Incredible Years Program," an NINR-supported program developed and tested by Dr. Gross and her colleagues between 1996 and 2001 to identify prevention and intervention strategies to promote social and emotional well-being and

school readiness in 3- and 4-year-old children and their families in low-income urban communities (*J Counsel Clin Psych* 71:261-278, 2003). The researchers used feedback from the parents involved in the Incredible Years Program in designing the Chicago Parents Program. Dr. Gross's team produced a series of videos using real-life scenarios that included 160 brief vignettes showing how parents can address situations that arise in relation to mealtimes, bedtimes, morning routines, misbehavior in public, limit-setting, not following through on limits, stress management, and problem-solving. Approximately 50 percent of the families in the videos are African American, about 25 percent are Latino, and the remaining are from other racial and ethnic groups. Dr. Gross showed several of the video vignettes during the May Council meeting.

The assessment of the program included 292 families from seven daycare centers in the Chicago area. The study population was approximately 58 percent African American and 34 percent Latino. Children in the study were 2-4 years old, and nearly all of the parents (84 percent) were single. Outcome data were collected at baseline, immediately post-intervention, and at 6 months and 1 year post-intervention. Findings are based on parent self-reports, teacher reports, and investigator observations of parent and child behavior. Results indicate that the greatest impact was associated with intervention dose (i.e., number of sessions attended), engagement in the intervention, and consumer satisfaction during participation and at the end of the program. The overall attendance (dose) was relatively low, with parents on average attending 39 percent of the scheduled sessions (4.7/12 sessions); one-third attended no sessions, which Dr. Gross noted is a common problem with prevention research. Compared to controls, the intervention group had significant improvements in parent discipline (increased follow-through on commands and limits and decreased corporal punishment) and in child behavior based on parental reports and

investigator observations. Improvements were maintained through 1-year follow-up. No effects were found for parenting self-efficacy; however, parents reported being very satisfied with the program; 100 percent reported they would recommend or highly recommend the program.

Parents also found the vignettes helpful or very helpful 94 percent of the time. A recent issue of Research in Nursing & Health included an article on participation in this trial (Garvey et al., Volume 29, pages 212-222, 2006; abstract at http://www3.interscience.wiley.com/cgi-bin/abstract/112605929/ABSTRACT), and an upcoming special issue of this journal will include study findings.

The Head Start of Chicago, which serves more than 16,000 children in more than 500 schools, has expressed interest in the program. Recommendations for continuation of this work include evaluation of strategies for improving recruitment, retention, and adherence rates in health disparities research; support of innovative approaches for increasing participation rates that can be replicated in community settings; and evaluation of the cost-effectiveness of different participation-enhancing strategies with different populations at risk for health disparities.

### V. NIH AT THE CROSSROADS: MYTHS, REALITIES, AND STRATEGIES FOR THE FUTURE (Dr. Elias Zerhouni, NIH Director)

Numerous events and factors have impacted the NIH budget, including the federal and trade deficits, Department of Defense and Homeland Security priority requirements, Hurricane Katrina needs, and domestic budget cuts. The aftermath of the doubling of the NIH budget also is apparent, especially given these additional financial constraints and Congress's support shifting to the physical sciences. Another factor is the rate of biomedical research inflation, which is

nearly twice that of general inflation. Questions about success rates have been focused on whether NIH is moving from its core mission and placing too much emphasis on translational as opposed to basic science; whether NIH is shifting towards solicited, agency-driven research (Requests for Applications [RFAs] and Program Announcements [PAs]) at the expense of unsolicited, investigator-initiated research, which is considered the hallmark of success; and whether the NIH Roadmap is consuming research funds.

Dr. Zerhouni explained that contrary to the first assumption, the only engine for basic research in the United States is the NIH, and NIH remains committed to ensuring that at least 50 percent of its research funds support basic research. A slight distortion occurred in FY02 and FY03 following the infusion of \$2 billion for biodefense research and supporting infrastructure. By FY05, the allocation for basic research had returned to 55 percent. Although industry spends more money overall on research than NIH, most of those funds are dedicated to applied research. NIH also remains committed to funding unsolicited research, which consistently has accounted for more than 90 percent of grant awards over the past decade. Finally, the Roadmap budget comprises only a small fraction of the total NIH budget, accounting for 1 percent of NIH funding in FY06 and 1.2 percent in FY07 and subsequent years. As Dr. Zerhouni explained, the Roadmap is not one large initiative; rather, it is composed of many initiatives, and in FY05, the Roadmap funded 345 individual grants to more than 300 PIs. About 40 percent of the awards funded basic research, 40 percent supported translational studies, and 20 percent went to highrisk investigations. The Roadmap provides a process to promote and synergize innovative research across ICs to address major cross-cutting NIH priorities. It follows a different peer review process involving short applications and applicant-driven ideas. Dr. Zerhouni acknowledged NINR's participation in Roadmap teams and initiatives.

Given this information, the major fundamental driver is large capacity building throughout the United States at research institutions and a dramatic increase in the number of tenure-track faculty; this factor accounts for about 90 percent of the increase in applicants and applications to NIH after 2004. The two other factors include budget appropriations that have fallen below inflation since 2003, and the 4-year budget cycling phenomenon. In the 2 years since the end of the doubling, NIH has received as many new applications (8,359) as it did during the 5-year doubling period between 1999 and 2003 (8,303). The same trend exists for the number of new applicants. The number of applications per applicant increased only slightly, from 1.2 to 1.4 applications per investigator. Thus, the near-doubling of the total number of applications submitted (from about 24,000 in 1998 to 43,000 in 2005) combined with increases in costs per grant and recent budget constraints has produced tension between the supply and demand. Further complicating this scenario is the availability (or lack thereof) of new funds in any one year. Uncommitted funds are derived from ending grants that were started 4-5 years ago combined with the budget increase from the current year, which, for FY06, was flat. However, 2003 commitments will become available in 2007, which will allow for a 3 percent increase in competing grants, even with another flat budget. In sum, because the number of applications per applicant increased, the success rate understates the funding rate. In FY05, the success rate for applications was 22.3 percent, whereas for individual applicants it was 27.6 percent. In FY06, the estimated rates for applications and individual applicants are 19.8 and 25 percent, respectively. Dr. Zerhouni emphasized that the payline is not the funding cut-off line.

Key to adapting to these and future changes and scenarios is knowing the facts and correcting misunderstandings, developing adaptive strategies (e.g., New Pathway to Independence Program,

IC efforts to promote new investigators, supply/demand management), and conveying a clear unified message. Accompanying these approaches is the need to transform medical research in the 21st century, from treating disease after symptoms appear and normal function is lost to intervening to prevent disease before symptoms appear and preserving normal function as long as possible; to understanding preclinical molecular events and developing the ability to detect patients at risk; and applying these strategies to greatly improve disease prevention and management to decrease financial and disability costs. The scope of the problem relative to the challenge may be conveyed through review of ongoing costs for diseases of greatest public health concern. For example, the total investment per American over the past 30 years to affect a 63 percent decrease in mortality from CHD is approximately \$110, or \$3.70 per year. Applying a similar calculation to the hundreds to thousands of other conditions and illnesses facing Americans, it is easy to see the impact of health care costs in the absence of transforming medical research and practice. A new paradigm for this transformation involves predictive, personalization, preemptive, and participation components. Nursing research can be expected to play a significant role in moving medicine from being curative to being preemptive.

VI. NINR MISSION AND STRATEGIC PLAN DRAFT, 2006-2010 (Dr. Joan Austin, Council Member, and Ms. Mary Miers, NINR)

A working committee within Council, the Strategic Planning Workgroup, which is chaired by Dr. Kerr, has taken the lead on drafting NINR's Strategic Plan for 2006-2010. Planning for and development of NINR's Strategic Plan for 2006-2010 began in June 2005, with the Strategic Planning Retreat. The Council Strategic Planning Workgroup met in August to shape the major themes of the first draft of the Plan, which were discussed with the Council Planning

Subcommittee and presented at the September 2005 Council meeting. The Subcommittee continued to make progress on the Plan and met through monthly teleconferences between October 2005 and January 2006, when the revised draft was presented to Council for review, after which the Plan was revised further, presented at the National Nursing Research Roundtable Annual Meeting in March 2006, and posted for 2 months on the NINR Web Site for public comment. The Plan was revised again and presented to Council for review at the May 2006 NACNR meeting. The final Plan and supporting text will be prepared for publication over the summer, and the finished product will be released on October 11, 2006, at the 20th Anniversary Research Symposium, "Making it Happen: The Future of Nursing Research."

Forty-two responses were received during the public comment period, some with multiple signatories, and included four comments from professional organizations and seven from nursing school Deans or Associate Deans of Research. Additional comments were submitted by investigators, students, and nurses in community practice. The public advised NINR to expand informatics to enhance patient safety, nursing practice, and research; develop and use new technologies; support end-of-life research and further development of infrastructure for the field; provide support for health disparities research efforts; add more research on nurse-sensitive and system-related outcomes; and emphasize partnerships including the use of existing databases. Additional comments from within NINR included suggestions to re-examine sections on caregiving, symptom management, and self-management to eliminate overlap and emphasize scientific discovery (in addition to translation and delivery of care) to ensure clarity outside the nursing research community; add goals for areas of research; and address editorial notes.

Both NINR's mission statement and the Strategic Plan for 2006-2010 were amended to reflect these comments and recommendations. The mission statement was revised to reflect decisions about placement of text on self-management, symptom management, and caregiving into a single section on quality of life. The new mission is "to promote and improve the health of individuals, families, communities, and populations, and to support and conduct clinical and basic research and research training on illness across the life span. The research focus encompasses health promotion and disease prevention, improving quality of life, eliminating health disparities, and promoting research on the end of life. NINR seeks to extend nursing science by integrating the biological and behavioral sciences, applying new technologies to nursing research questions, improving research methods, and developing nursing research investigators." Revisions to the Strategic Plan reflect NINR proposals for restructuring the planning document and comments received. The draft plan is now founded on four strategic objectives, which are similar to the prior four major themes, and four areas of research emphasis, which consolidate the prior six priority research areas with the new umbrella "quality of life" area. Goals tied to each of the four areas of research emphasis also have been identified, as follows:

- ➤ Health promotion and disease prevention: To provide evidence-based tools and interventions for achieving health-promoting and risk-reducing behaviors over time. A new area of research to be supported under this emphasis category involves investigations of opportunities to identify and ameliorate the long-term consequences of prematurity, including near-term infants at risk for complications.
- > Improving quality of life: To promote optimal quality of life for healthy or at-risk individuals, patients, and caregivers in a variety of settings.

- > Eliminating health disparities: To identify the factors that contribute to health disparities, and to design interventions for underserved, at-risk, and vulnerable groups.
- ➤ End-of-life research: To improve the end-of-life experience for patients, families, and caregivers, and to develop a strong research program to address end-of-life issues. A new area of research to be supported through this portfolio is the development of informatics tools that will facilitate the integration and analysis of data from end-of-life studies.

VII. UPDATE: NINR HEALTH DISPARITIES PORTFOLIO (Dr. Paul Cotton, Office of Extramural Programs, NINR)

NINR defines health disparities as the differences in the incidence, prevalence, mortality, and burden of disease and other adverse health conditions that exist between specific population groups within the United States, including African Americans, Asian and Asian Pacific Islanders, Hispanics and Latinos, and Native Americans and Native Alaskans. Medically underserved populations are defined as populations with inadequate access to or reduced utilization of high-quality health care, such as low-literacy, rural, and low-income populations and the disabled. NINR has used and will continue to use Institute of Medicine (IOM) reports in shaping its health disparities strategic plans and initiatives. Two prominent nurse scientists, Dr. Martha Hill of Johns Hopkins University and Dr. Antonia Villarruel of the University of Michigan, have participated in the development of two IOM reports on health disparities, Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care, which was published in 2003, and Examining the Health Disparities Research Plan of the National Institutes of Health: Unfinished Business, which was published earlier this year.

NINR's Strategic Plan on Reducing Health Disparities focuses on research, infrastructure, and outreach. The research goals outlined in the 2000-2005 Strategic Plan included encouragement of innovative applications that address health disparities, and support for investigator-initiated research proposals that address health disparities. Infrastructure goals included enhancing infrastructure for an increased emphasis on health disparities and enhancing mentorship, training, and research opportunities for minority students and researchers. Outreach goals included maintaining involvement with minority professional nursing organizations (e.g., National Coalition of Ethnic Minority Nurse Associations), and enhancing communication and dissemination activities between minority investigators.

NINR initiatives stemming from the health disparities strategic plan include Funding
Opportunity Announcements (FOAs) (e.g. RFAs, PAs, and PARs). Examples of research
training FOAs designed to increase the number of well-trained minority researchers include the
NINR Mentored Research Scientist Development Award for Underrepresented or Disadvantaged
Investigators (PAR-05-135) and Research Supplements to Promote Diversity in Health-Related
Research (PA-05-015). Research-focused FOAs in NINR's portfolio designed to address
specific health conditions are Health Disparities Among Minority and Underserved Women (PA04-153), Health Promotion Among Racial and Ethnic Minority Males (PA-04-027), Enrolling
Women and Minorities in HIV/AIDS Research Trials (PAS-03-168), Reducing Preterm and Low
Birth Weight in Minority Families (PA-04-027), Community Participation in Research (PAR-05026), and Social and Cultural Dimensions of Health (PA-05-029). NINR also supports 17 P20
Partnership Centers across the United States and Puerto Rico. Each Partnership Center is a
relationship between a school of nursing with an established research-intensive program that

focuses on health disparities and a minority-serving institution that is developing a research program. NINR also supports four P30 Centers of Excellence in both rural and urban settings, each with a focus on health disparities. Within the past 5 years, areas of research emphasis in NINR's Health Disparities portfolio have included chronic disease, caregiving, neighborhood and housing, pregnancy outcomes, technology, and underserved populations. As a result of its initiatives, NINR has seen a 29 percent increase in the number of applications and a 25 percent increase in the funding of awards for health disparities research between 1999 and 2005.

Dr. Cotton highlighted findings from NINR-supported research on health disparities. Dr. MaryFran Sowers' investigation of ethnic differences in cardiovascular risk factor burden in nearly 3,000 women between 42 and 52 years old found that African-American and Hispanic women had the highest composite risk scores (P < 0.01). A substantial component of risk associated with ethnicity could be attributed to socioeconomic status and geographic location. Dr. Martha Hill studied 309 inner city African-American men 21-54 years old in a comparison of an intensive blood pressure control intervention that included a comprehensive educational, behavioral, and pharmacological intervention team versus a less intensive, standard referral that included medication and educational material for the patient but no orchestrated team care approach. During the 36-month study, men receiving the more-intensive intervention had a higher percentage of blood pressure control and decreased progression of left ventricle mass. Dr. Thelma Patrick confirmed the inverse relationship between homocysteine and folic acid in African-American women with preeclampsia, a finding that has implications for the development of arteriosclerosis in this population. Dr. Clarann Weinert found that computer-delivered interventions to chronically ill women in rural settings appeared to be associated with increased social support and self-esteem compared with controls who did not receive the interventions.

Dr. Patricia Reagan's study of more than 3,000 women investigated how preterm birth is influenced by social context broadly defined as measures of neighborhood disadvantage and cumulative exposure to state-level income inequity, after controlling for individual risk factors. Evidence indicated that neighborhood poverty rates and housing vacancy rates were associated with an increase in preterm births among African Americans and Hispanics. Dr. Anne Skelly electronically tracked the movement of 121 study participants for 1 week to demonstrate how maps of where people live and carry out their daily activities can be used by health care providers to plan highly targeted diabetes intervention programs.

Upon review of the NINR portfolio and published literature, staff have identified possible emerging areas of research on health disparities for further consideration, including near-term births, children, persons with disabilities, symptom management, quality of life, hard-to-reach populations, chronic disease, and continued training.

Following this presentation and discussion, Dr. Grady thanked participants and attendees for their time and interest and then adjourned the open session of the meeting.

#### **CLOSED SESSION**

This portion of the meeting was closed to the public in accordance with the determination that this session was concerned with matters exempt from mandatory disclosure under Sections

552b(c)(4) and 552b(c)(6), Title 5, US Code, and Section 10(d) of the Federal Advisory

Committee Act, as amended (5, USC Appendix 2). Members absented themselves from the meeting during discussion of and voting on applications from their own institutions or other applications in which there was a potential conflict of interest, real or apparent. Members were asked to sign a statement to this effect.

### **REVIEW OF APPLICATIONS**

The members of the NACNR considered 81 research and training grant applications on which NINR was the primary Institute; these applications requested a total of \$19,444,882. (direct costs year 01). The Council also considered 99 applications on which another Institute/Center was primary and NINR was secondary; these applications requested a total of \$37,400,420(direct costs year 01). The Council concurred with the IRG recommendations on these 180grant applications.

### **ADJOURNMENT**

The 59th meeting of the NACNR was adjourned at 1:00 p.m. on May 25, 2006.

### **CERTIFICATION**

I hereby certify that the foregoing minutes are accurate and complete.

Patricia A. Grady, Ph.D., R.N., F.A.A.N

Chair

National Advisory Council for Nursing

Research

Mary E. Kerr, Ph.D., R.N., F.A.A.N.

Executive Secretary

National Advisory Council for Nursing

Research